

(3) Builds the replacement system and tests it for comparability with the existing 2 GHz system.

(b) *Comparable facilities.* The replacement system provided to an incumbent during an involuntary relocation must be at least equivalent to the existing FMS system with respect to the following three factors:

(1) *Throughput.* Communications throughput is the amount of information transferred within a system in a given amount of time. If analog facilities are being replaced with analog, the ET licensee is required to provide the FMS licensee with an equivalent number of 4 kHz voice channels. If digital facilities are being replaced with digital, the ET licensee must provide the FMS licensee with equivalent data loading bits per second (bps). ET licensees must provide FMS licensees with enough throughput to satisfy the FMS licensee's system use at the time of relocation, not match the total capacity of the FMS system.

(2) *Reliability.* System reliability is the degree to which information is transferred accurately within a system. ET licensees must provide FMS licensees with reliability equal to the overall reliability of their system. For digital data systems, reliability is measured by the percent of time the bit error rate (BER) exceeds a desired value, and for analog or digital voice transmissions, it is measured by the percent of time that audio signal quality meets an established threshold. If an analog voice system is replaced with a digital voice system, only the resulting frequency response, harmonic distortion, signal-to-noise ratio and its reliability will be considered in determining comparable reliability.

(3) *Operating costs.* Operating costs are the cost to operate and maintain the FMS system. ET licensees must compensate FMS licensees for any increased recurring costs associated with the replacement facilities (e.g., additional rental payments, increased utility fees) for five years after relocation. ET licensees may satisfy this obligation by making a lump-sum payment based on present value using current interest rates. Additionally, the maintenance costs to the FMS licensee must be equivalent to the 2 GHz sys-

tem in order for the replacement system to be considered comparable.

(c) The FMS licensee is not required to relocate until the alternative facilities are available to it for a reasonable time to make adjustments, determine comparability, and ensure a seamless handoff.

(d) *Twelve-month trial period.* If, within one year after the relocation to new facilities, the FMS licensee demonstrates that the new facilities are not comparable to the former facilities, the ET licensee must remedy the defects or pay to relocate the microwave licensee to one of the following: its former or equivalent 2 GHz channels, another comparable frequency band, a land-line system, or any other facility that satisfies the requirements specified in paragraph (b) of this section. This trial period commences on the date that the FMS licensee begins full operation of the replacement link. If the FMS licensee has retained its 2 GHz authorization during the trial period, it must return the license to the Commission at the end of the twelve months. FMS licensees relocated from the 2110-2150 and 2160-2200 MHz bands may not be returned to their former 2 GHz channels. All other remedies specified in paragraph (d) are available to FMS licensees relocated from the 2110-2150 MHz and 2160-2200 MHz bands, and may be invoked whenever the FMS licensee demonstrates that its replacement facility is not comparable, subject to no time limit.

[61 FR 29694, June 12, 1996, as amended at 65 FR 48183, Aug. 7, 2000; 68 FR 3464, Jan. 24, 2003]

§ 101.77 Public safety licensees in the 1850-1990 MHz, 2110-2150 MHz, and 2160-2200 MHz bands.

(a) Public safety facilities are subject to the three-year voluntary and two-year mandatory negotiation period, except as otherwise defined in paragraph 101.69(c). In order for public safety licensees to qualify for extended negotiation periods, the department head responsible for system oversight must certify to the ET licensee requesting relocation that:

(1) The agency is a Police licensee, a Fire Licensee, or an Emergency Medical Licensee as defined in §90.7 of this

chapter, or meets the eligibility requirements of § 90.20(a)(2) of this chapter, except for § 90.20(a)(2)(ii) of this chapter, or that it is a licensee of other part 101 facilities licensed on a primary basis under the eligibility requirements of part 90, subpart B of this chapter; and

(2) The majority of communications carried on the facilities at issue involve safety of life and property.

(b) A public safety licensee must provide certification within thirty (30) days of a request from a ET licensee, or the ET licensee may presume that special treatment is inapplicable. If a public safety licensee falsely certifies to an ET licensee that it qualifies for the extended time periods, this licensee will be in violation of the Commission's rules and will subject to appropriate penalties, as well as immediately subject to the non-public safety time periods.

[61 FR 29695, June 12, 1996, as amended at 62 FR 12758, Mar. 18, 1997; 62 FR 18936, Apr. 17, 1997]

§ 101.79 Sunset provisions for licensees in the 1850-1990 MHz, 2110-2150 MHz, and 2150-2160 MHz bands.

(a) FMS licensees will maintain primary status in the 1850-1990 MHz, 2110-2150 MHz, and 2160-2200 MHz bands unless and until an ET licensee requires use of the spectrum. ET licensees are not required to pay relocation costs after the relocation rules sunset (*i.e.* ten years after the voluntary period begins for the first ET licensees in the service). Once the relocation rules sunset, an ET licensee may require the incumbent to cease operations, provided that the ET licensee intends to turn on a system within interference range of the incumbent, as determined by TIA Bulletin 10-F of any standard successor. ET licensee notification to the affected FMS licensee must be in writing and must provide the incumbent with no less than six months to vacate the spectrum. After the six-month notice period has expired, the FMS licensee must turn its license back into the Commission, unless the parties have entered into an agreement which allows the FMS licensee to continue to operate on a mutually agreed upon basis.

(b) If the parties cannot agree on a schedule or an alternative arrangement, requests for extension will be accepted and reviewed on a case-by-case basis. The Commission will grant such extensions only if the incumbent can demonstrate that:

(1) It cannot relocate within the six-month period (*e.g.*, because no alternative spectrum or other reasonable option is available), and;

(2) The public interest would be harmed if the incumbent is forced to terminate operations (*e.g.*, if public safety communications services would be disrupted).

[61 FR 29695, June 12, 1996, as amended at 62 FR 12758, Mar. 18, 1997]

§ 101.81 Future licensing in the 1850-1990 MHz, 2110-2150 MHz, and 2160-2200 MHz bands.

After April 25, 1996, all major modifications and extensions to existing FMS systems in the 1850-1990 MHz, 2110-2150 MHz, and 2160-2200 MHz bands will be authorized on a secondary basis to ET systems. All other modifications will render the modified FMS license secondary to ET operations, unless the incumbent affirmatively justifies primary status and the incumbent FMS licensee establishes that the modification would not add to the relocation costs of ET licensees. Incumbent FMS licensees will maintain primary status for the following technical changes:

- (a) Decreases in power;
- (b) Minor changes (increases or decreases) in antenna height;
- (c) Minor location changes (up to two seconds);
- (d) Any data correction which does not involve a change in the location of an existing facility;
- (e) Reductions in authorized bandwidth;
- (f) Minor changes (increases or decreases) in structure height;
- (g) Changes (increases or decreases) in ground elevation that do not affect centerline height;
- (h) Minor equipment changes.

[61 FR 29695, June 12, 1996, as amended at 62 FR 12759, Mar. 18, 1997; 65 FR 38327, June 20, 2000]